

**A STRATEGIC ANALYSIS OF AMBULANCE
USER FEES**

**ADVANCED LEADERSHIP ISSUES IN
EMERGENCY MEDICAL SERVICES**

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ABSTRACT

This research project evaluated the fee for service charges assessed by 81 fire department ambulance services in the Chicago metropolitan area. The objective of the project was to conduct a descriptive examination of user fee assessments for emergency ambulance service imposed by a selected group of EMS organizations for the purpose of developing a benchmark tool for comparison with ambulance fees of the Naperville Fire Department.

The study attempted to answer the following research questions:

1. What is the prevalence of ambulance user fee charges among surveyed agencies?
2. Do user fee charges accurately reflect ambulance service costs?
3. How efficient are fire service organizations at collecting user fee revenues?

Research procedure consisted of using a purposive sampling method to identify a survey population of 112 fire service agencies providing emergency ambulance transport services. A survey instrument was mailed to the chief administrator of each agency. This instrument consisted of four sections; department characteristics, fee for service charges, revenue sources, and collection practices. A response rate of 72.3 percent (81 agencies) was attained. All responding agencies provided emergency ambulance transport services at the advanced life support (ALS) level.

Survey results showed a wide variation in the types and amounts of fee for service charges leveled by the responding agencies with more than 92 percent imposing some type of ambulance user fee. Agencies consistently imposed fees on non-resident patients more often and at higher rates than they did to patients who were residents of their jurisdiction. Despite fee assessments being common place, user fee revenues rarely provided a significant offset to operating expenses averaging only 15 percent among respondents. Answers to questions on collection practices demonstrated a strong trend (60 percent) toward contracting with private

agencies to provide billing and collection services. Results indicated that agencies using private billing services enjoyed a higher overall collection rate and had a greater tendency to accept direct assigned payment from third party payers.

Based upon survey results recommendations were made for the Naperville Fire Department to analyze full service cost data and to develop a fee schedule reflecting full cost and subsidized cost options. In addition, to enhance collection of user fee revenues, a recommendation was made to implement billing and collection procedures to maximize billing of third party payers for allowable ambulance services.

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INTRODUCTION

As public managers search for means to maximize funds available for the provision of vital public services, the imposition and collection of user fee charges has become a more prominent factor in the revenue generation strategy of municipal governments. Increasingly, as frustration over local property tax rates mounts, taxpayers have embraced the notion that they should pay only for those government services they receive directly. This dissatisfaction, growing over the last two decades, frequently manifests itself in the form of strong political opposition to tax increase proposals, statutory enactment of tax limitation measures, and calls for entrepreneurial government initiatives including privatization and benefit-based finance. Unfortunately for government officials, simultaneous with these calls to decrease the tax burden, local residents have heightened rather than lowered their expectations concerning the scope, efficiency, and value of most government services. Faced with constraints on their ability to generate operating funds by traditional means and concurrent demands to broaden existing services, public managers have turned to user fees as an expedient revenue generating option.

The intent of this project is to conduct a descriptive examination of the nature of user fee assessments imposed by fire service agencies for ambulance services in metropolitan Chicago in order to develop a benchmark tool for evaluating rates charged by the Naperville Fire Department. Data will be gathered by conducting a purposive survey of selected municipal fire agencies.

This project will attempt to answer the following research questions.

1. What is the prevalence of ambulance user fee charges among surveyed fire service agencies?
2. Do user fee charges accurately reflect ambulance service costs?
3. How efficient are fire service organizations at collecting user fee revenues?

BACKGROUND AND SIGNIFICANCE

Daily, government administrators face the trying task of responding to conflicting taxpayer mandates requiring them to maintain (and often expand) municipal service levels while holding the line on taxes at the same time. In response to this dichotomy, officials have increasingly looked to less traditional revenue sources to generate the monies necessary to support those services the public demands. One method which has found increasing acceptance over the last 20 years is that of benefit based finance, the levying of special assessments, service charges, and user fees upon the consumers of specific municipal services. Although user fee charges for municipal ambulance services have existed for many years, fire service managers have few models available to guide them in uniformly applying such fees.

Lacking such a clear and simple methodology for calculating appropriate fees, fire service administrators frequently turn to industry wide rate surveys to determine what they should charge. While relying on industry rate patterns, whether regional or national, provides some validation for charging a user fee, it offers little assistance to administrators or justification to the public if the fee charges bear no relationship to an agency's direct service costs, revenue needs, and collection inefficiencies. Nor does comparison of service charges provide insight into the efficiency, effectiveness, and excellence of municipal ambulance services, which fee charges are intended to support.

The concept for this study resulted from discussion about exploring and justifying alternative funding sources for EMS operations in the Advanced Leadership of Emergency Medical Services course offered at the National Fire Academy.

LITERATURE REVIEW

User Fees in the Public Setting

While not a new concept in the area of government finance, reliance on user fee assessments has increased dramatically since the 1970s. Berman (1997) noted that since the mid-1970s nearly three-quarters of municipal governments have adopted some form of user fee. “Between 1971 and 1981, charge revenues – including fees and special assessments – of U.S. municipalities tripled while property tax revenues were up by only 120 percent” (McCarthy, Neels, Rydell, Stucker and Pascal, 1984, p. 3). A 1993 national survey conducted by the Government Finance Officers Association found that responding government entities assessed user fee charges in more than 50 different service areas (Levitan and Sliverman, 1994, p. 62).

Fire protection provided by local government is one of the oldest and most traditional of municipal services. Elected officials and career administrators have rightly viewed fire protection as a broad based public service which helps not just the individual service recipient, but neighboring home and business owners as well as the interests of the community as a whole. At first glance, the efficient extinguishment of a fire in a resident’s home or business appears to be a private service employed solely for an individual’s benefit, since it limits the life risk and property loss to a particular property owner. However, a broader perspective shows that quick extinguishment realistically limits fire spread from one property to another and also reduces the risk of loss to neighboring occupants. In this way, effective firefighting safeguards the lives of all citizens potentially exposed, protects the properties of numerous landowners, and preserves the tax base of the entire community. Such a philosophical outlook based upon these residual benefits of fire protection makes it difficult to fix a reasonable fee for individual consumption of firefighting services.

Since the 1960s fire departments, like most other divisions of government, have vastly expanded the degree and variety of services they provide to the public. These increased roles and responsibilities place greater pressure on municipal budgets. Today most fire departments, in addition to fire protection,

count among their assigned duties both emergency and non-emergency functions including code enforcement, disaster management, hazardous materials response, public education, technical rescue, public education, and emergency medical services (EMS). In many cases, the individual benefit derived from use of these services is more readily distinguished from the broader public one making it attractive to consider assessing some type of user fee. This is particularly so with EMS. In most fire departments, providing response to medical emergencies represents a significant share of the workload.

User Fee Definition

Withers (1994, p. 4) defined user fees as “charges for voluntarily purchased services that benefit specific individuals”. He identified three distinguishing characteristics of user fees to help identify services appropriate for such assessments.

- An identifiable group of individuals benefits from the service
- Nonpaying individuals can be excluded from receiving the service
- Individuals have the opportunity to choose whether they receive the service

User fees differ from taxes in that the mandatory assessment of a tax prohibits all citizens from avoiding payment whereas an individual may escape paying a user fee simply by forgoing consumption of the service.

The acceptability of assessing a user fee for a specific government service varies with the nature of that service. Like fire protection the general community benefit stemming from police patrol operations makes this an unlikely activity for a user fee charge, but charging fees for unlocking car doors or for crowd control efforts required to safeguard large scale private events do represent likely services appropriate for fee charges. All services cannot be so precisely categorized. Three basic types of government services exist (McCarthy et al., 1984, p. 6) public goods, private goods and merit goods.

Public goods consist of services which benefit the general public in such a way as to make individual beneficiaries difficult to discern and even more difficult to charge. One individual's use of the service does not detract from anyone else's benefit. The fire protection and police patrol activities previously noted represent such services.

Private goods sit at the opposite end of the spectrum from public goods. The benefits of these government services such as access to a public golf course or admission to a public swimming pool flow solely to those individuals who consume them. The existence of statutorily sanctioned monopolies permits municipalities to produce private goods.

Merit goods represent the final type of government service provided. They hold the midway position between public and private goods possessing characteristics of each. Identifiable individuals utilize merit good services but the consumption of these goods and services have spill over effects benefiting the general public too. Public health services such as communicable disease treatment constitutes a merit good. This treatment renders a specific individual service, which also provides a benefit accruing to the general public. Fire department provision of ambulance services falls into this category as well.

Ambulance services have identifiable individuals (patients) who directly benefit from consumption of EMS resources. In many cases these same patients, most of who do not present with critical life threatening conditions, have a right to choose whether they wish to use the municipal service or not. This satisfies two of Withers' three distinguishing characteristics for user fee application. Unfortunately, due to the sometimes life threatening circumstances citizens find themselves in when they request ambulance services, ethical considerations mandate that municipalities forgo the concept of excluding nonpaying individuals from receiving the service. Because of this and the broader health, welfare, and quality of life benefits EMS generates for the entire community, ambulance services qualify as a merit good.

Pricing determinations vary with the three types of services. Assessing charges for public and private goods is a relatively simple exercise. It makes sense for governmental bodies to fully finance the provision of public goods because of the generalized community benefits they bestow. Likewise because of the overriding individual benefits associated with private goods local, governments should

impose full cost charges to those who consume them. To do otherwise would result in taxpayers subsidizing the activities of individuals and special interests.

Determining merit good charges proves a more challenging task. Considering the dual public-private benefits of merit goods, an appropriate user fee should reflect both an individual assessment and a public subsidy. The individual assessment explicates both the benefits obtained by the consumer as well the temporary loss of availability of the service to the rest of the citizenry. The public subsidy accounts for public good benefits and helps to reduce individual user fee charges. The difficulty comes with the trying to attain a justifiable balance between the two.

“Charging for services is not simply a matter of raising cash. Economically efficient charging policies seek to achieve an optimal allocation of resources so as to maximize the welfare of individuals in the community. This requires account to be taken of the balance between the benefits and costs of service provision. On the benefit side of the equation ... merit good and public good characteristics made clear the need to consider possible benefits accruing to the community as well as to the service recipient. The size of any external costs and benefits of local authority services are ultimately matters of fact rather than of value judgement. It is therefore possible in theory to determine the amount of subsidy required where external benefits occur so that an optimal level of service provision is achieved. Where no such externalities exist services should be charged for at full cost. This would be an economically efficient charging policy.” (Bailey, 1986, p. 411)

Advantages of User Fees

Proponents of user fees cite the following advantages to their application.

- Users bear the burden of service consumption
- Fees reduce the tax subsidy for the service
- Fee charges promote service efficiency

Depending on the type of good considered (public, private, or merit), user fees promote equity by allowing government officials to place a more proportionate burden of service costs upon the individual consumer. Assessing a fee to all users of a public service permits government officials to recover costs from non-taxpaying, non-resident users as well as taxpaying residents of the community. Applying fee charges to specific consumers of a public service also offers the advantage of being politically acceptable to both the general electorate and to political officials. While the electorate wishes to avoid

charges for services they have the option to refuse, political officials wish to avoid confronting the citizens' distaste for new revenue tax proposals.

User fees provide an alternate revenue source for funding public services, a source restricted only by the demand for those services. The monies obtained through user fees and applied directly back to designated service expenses free up the allocation of existing general revenue funds and make service delivery less dependant on tax revenues. These newly available funds may then be made available to finance additional public goods or returned to the general fund to decrease the tax levy.

User fees encourage efficiency in the consumption, management, and provision of public services. A casual review of basic economic price and demand theory explains that as the cost of a good (in this case ambulance service) decreases, the demand for that particular good will increase. Therefore when governments provide desirable services for free, the potential for unlimited demand for and over-use or even abuse of that service exists. Harris and Seldon (1977) argued that when the supply of a government service involves a significant private good aspect, then charging the user directly for the service represents a more appropriate and efficient method of financing than tax subsidy.

Charging for a service promotes efficiency by regulating demand and preventing over consumption. Consumers, wishing to avoid direct charges, will reconsider their need for a service when it is no longer available for free. This very act of reconsideration creates a self-regulating process controlling consumption decisions. By imposing a reasonable fee, government officials may prevent over consumption of vital services while at the same time ensuring their continued availability at costs, which are not prohibitive to those citizens who truly need them. If government officials will listen, the decisions these citizens make will speak loudly about the value they place on such goods and the levels of service they desire.

Charging for a government service, because it requires justification for establishing fees, focuses attention on costs. This proves beneficial in two ways. For one, the taxpayer gets to see the true cost of the services they use. As with a private good, the customer sees a direct link between the fee they pay

and the service they receive providing a basis for estimating value and efficiency. Informed citizens may be more willing to support desirable public services if they recognize the community benefits provided, understand the costs incurred, and acknowledge administrator's efforts to maximize benefits and minimize costs. Conversely, citizens may also become antagonistic to those same administrators if they perceive that their efforts have not produced services that perform effectively or function efficiently.

This highlights the second benefit of focusing attention on costs. "Unless the full costs of an activity can be accurately estimated, appropriate pricing of the service is virtually impossible." (Howard, 1987, p. 2) In order to apply a justifiable charge to any service, administrators must understand the full cost of providing that service and identify the customers who use the service. Armed with an awareness of anticipated service costs, projected customer base, and estimated revenues, administrators can make knowledgeable decisions about pricing, distributing, and subsidizing government services.

Disadvantages of User Fees

User charges have several significant disadvantages which public officials must also evaluate as part of their determination whether to impose a monetary fee or not. These include objections relating to the following points.

- Service users not easily identified
- Regressive effects on the disadvantaged
- Potential negative effects on public/political images
- Legal tax implications

The revenue generating potential for any user fee assessed for a government service begins with the ability to: 1), specifically identify individual consumers, and 2), separate these users in a manner which allows officials to collect payment from them. As noted previously, the nature of the good provided determines its applicability for service charges. Unless the service provided constitutes a purely private good, questions regarding the appropriateness of charging individual users will likely stir

considerable debate among those who favor benevolent government and those who favor entrepreneurial government.

Once clearly identified, government agencies have the difficulty of collecting from service recipients. Again the nature of the service affects the efficiency of revenue collections. Unlike collecting fees at a public golf course from those individuals who willingly pay full price before they use the service, medical and legal ethics preclude ambulance personnel from withholding care for patients prior to full payment. As a result, charges are assessed after treatment and often must compete with the patient's higher hospital bills for payment priority, thereby lengthening the payment cycle. The economics of the community will also influence this aspect. If the population involves a large proportion of economically disadvantaged citizens, overall collection rates may suffer, requiring other users to subsidize the service to a greater degree through their fee payments. This may result in excessive user fees for the paying customers if the agency charges to collect full service costs.

A common objection to user fees concerns their potential for regressiveness. This implies that the horizontal equity of charging all users the same fee for the same service places a higher burden on low-income citizens. These individuals, who expend a higher percentage of their income for the service, may be those least able to pay. McCarthy et al. (1984, p. 8) noted that this potential damage may be limited by three factors. First, governments rarely assess user fees to redistributive programs of which low-income citizens tend to use a disproportionate share. Second, assessing user fees for true public good services is not feasible. Third, government officials can build in explicit protections (discounts, exemptions) into user fees to protect the interests of low-income groups.

User fee charges for public services may have significant political consequences. The decision to charge for services could influence public perceptions of a municipal agency in a negative way. It may also affect perceptions of the agency's employees towards the service as well, especially in a volunteer type organization. Vigorous efforts to collect delinquent debts also have significant backlash

potential if not performed in a consistent and humane manner. Political leaders who enact user fees may ultimately become the targets of a dissatisfied electorate.

Legal Considerations

In evaluating the appropriateness of user fee charges, officials must consider objections based upon legal interpretations. Anti-tax proponents have offered credible arguments about the need to expose some government activities to competitive markets to encourage greater operating efficiency. While competition may suit some services, it will not benefit others. Fire protection services, and in many cases municipal ambulance services, constitute a monopoly power of local governments. As such, officials must exercise great care not to exploit this monopoly power lest it lead to inconsistent or excessive pricing policies. (Bailey, 1986, p. 402)

Opponents have also challenged government user fees in court. User fee assessments represent a revenue collection mechanism independent of a municipality's taxing authority. In litigation, government officials bear the burden of proving that such fees constitute legitimate service charges rather than a hidden tax disguised as a user fee. Courts have established a three-point litmus test to distinguish user fees from taxes. (Everett, 1994, p. 4) Government officials should heed these points in determining service fees.

1. Fees must be identified with a specific government service rather than general revenue collection.
2. Payment must be voluntary; a recipient must request the service in order for the government to impose a fee.
3. The recipient must derive a direct benefit from the service.

Lastly, officials must consider the personal tax implications of user fees. Though citizens may deduct property taxes and special assessments from their income taxes, user fees provide no such exemption. Citizens bear the full weight of these government charges.

Guidelines for Determining Fees

The Government Finance Officers Association (1992) has established the following list of five guidelines for local government officials to steer by when they have decided to adopt or expand user fees.

1. Identify services appropriate for user fee charges
2. Collect service cost data, both direct and indirect costs
3. Determine service pricing
4. Evaluate other market factors
5. Evaluate public reaction

In identifying services appropriate for user fee charges, officials should examine the nature of a service as to whether it represents a public, private, or merit good. Additionally, services should meet four criteria to be considered suitable for user fees. Most importantly, individual users should receive the primary benefits of the service. This benefit should accrue to the user in a way not shared by and sometimes at the exclusion of the general public. Demand for the service should have some elasticity as it relates to ability to expand. Fee charges should not result in regressive economic inequities for disadvantaged citizens. Lastly, administrative costs for the service should be low. Fees should defray the operational costs associated with providing the service. Excessive administrative costs will drive up fee charges dramatically.

Officials must identify full service costs prior to establishing fee schedules or determining subsidy levels. They must analyze personnel, equipment, administrative, and capital costs. Since fire department ambulance services typically operate in a multi-service environment, officials must also apply accounting procedures that allow them to distinguish between costs of differing activities and allocate them appropriately.

“The foundation of a cost recovery program is to determine the value of the services you provide. This service value should be approached the same way a business owner figures the cost of providing his or her goods. There are no free services.” (Ward, 1987, p. 41)

Once they have completed evaluations of service types and service costs, officials may establish a schedule of fees. Among other issues, this process requires them to reach consensus on whether to

price for full cost recovery or for partial cost recovery and support the service with a public subsidy.

“The public sector replicates private sector pricing in the long run by setting its price at average cost.

Whether it (the public sector) recovers the full cost is a function of whether sufficient numbers of people are willing to pay for the commodity at this price.” (Lazar, Jensen, Goebel, 1996, p. 55)

Consideration of market factors also comes into play. Even with the existence of monopolistic protections for municipal ambulance providers, price comparisons can and will be made between government and private providers as well as between different government agencies. Administrators should anticipate this and prepare themselves to justify their fee charges based not only on price but also on service quality and community characteristics.

As noted previously, officials should anticipate the public’s reaction to user fees. Their acceptance or resistance may depend upon the previous existence of user fees, acknowledged excellence (or lack of) of the service, and the degree to which officials have presented a justifiable case. The impact of a negative backlash from the public may linger, tainting public perceptions for years.

Rate Evaluation

Government officials should employ a structured method to determine appropriate user fees for ambulance services. The GFAO guidelines listed previously provide a template of tasks which officials may perform to varying degrees when establishing such fees. This model leads officials through an active decision making process. The process aids them in establishing charges which on one hand bring in sufficient revenue to defray operating costs while on the other impose reasonable fees and practices which do not discourage individuals in need from summoning the service when they need it.

The evaluation process also provides data to help officials justify their rates, which will inevitably be compared against those of other services. Such comparisons commonly dwell on the price of user fees. This over simplifies the evaluation since many unique agency and community factors in combine to influence the price of user fees for a particular service. In the competitive bidding process for ambulance transport contracts, Lazar, Jensen, and Goebel (1996, p. 11) identify two primary

methods for evaluating services; price based evaluations and performance based evaluations. Price based evaluations focus attention solely on price comparisons. Contract awards generally go to the lowest qualified bidder. While economical and simple, this method does not stimulate excellence in service performance. Performance based evaluations tend to be more complicated. These encourage more rigid performance criteria by evaluating bidders on various aspects of service performance. Based on more subjective criteria, contracts usually go to the bidder presenting the best overall value, the one offering the best combination of price and performance.

Such methods of service evaluation highlight the hazard of oversimplifying comparison by dwelling on price alone. Single criteria evaluations based on user fee prices provide no information on service effectiveness, efficiency, or excellence. When attempting to benchmark user fee rates, government officials should pay careful attention to factors affecting production costs and the economic environment in which a service operates. Stout (1985, p. 46) provides a comparison model for examining specific production and environmental cost factors which affect not only price but service quality as well. These factors include the following.

Production Cost Factors

Clinical Sophistication
 Response Time Reliability
 Transport Volumes
 Geographic Difficulty of Coverage
 Population Density
 Quality of Dispatch Services
 Disaster Readiness
 System Stability
 Regional Cost of Living
 Level of Service Responsibility

Economic Environment Factors

Level of Local Tax Subsidy
 Rate Structure
 Medicaid Reimbursement Levels
 Medicare Reimbursement Levels
 Socio-Economic Mix
 Reimbursement for Non-Emergency
 Services
 Collection Practices
 Use of First Responder Programs
 Medical Accountability

In order to protect the interests of individual patients and the general community welfare, thorough evaluations of user fee rates should include a review of environmental and performance factors as well as price data. In their moment of need, individuals who require emergency ambulance services have no time to be discriminating shoppers.

Billing and Collection Practices

Government agencies level user fees on the consumption of certain government services in order to shift the burden of support, either in part or in full, from taxpayers at large to identifiable users of specific services. To accomplish this goal, they must achieve two major tasks. One, as discussed throughout this review, involves the establishment of prudent and justifiable service fees. Probably the more laborious of the two tasks due to the various public and political interests involved. However, all these efforts will be squandered, if a service agency fails in the second task of collecting billable fees from users. The actual return of monies in amounts substantial enough to reduce the need for subsidy from general tax revenues ultimately fulfills the goal of establishing a service user fee.

“A good billing system integrates policies, procedures, and information processing ... to assist in meeting the company’s objectives.” (Jameson, 1985, p. 47) To perform billing and collection functions, government agencies have the option of deciding whether to perform the process internally or contract out to the private sector. Either way officials must ensure the establishment of four administrative and accounting systems. (Berman, 1997, p. 71)

1. Procedures
2. Personnel
3. Processing
4. Internal Control

Procedural guidelines must exist which enhance the gathering of data necessary for billing. This data includes patient identification, incident information, and billable services provided. Procedural functions involve the development of forms for data collection and the implementation of practices regulating the gathering and disseminating of often confidential information.

Personnel functions entail defining the scope of responsibility and providing appropriate training for all individuals involved in the billing and collection process. For ambulance service billing this will encompass field providers and office personnel alike. Each plays an important role in collecting and safeguarding accurate information.

Process functions detail guidelines for performing billing and collection activities. They should specify policies and routines regarding the following:

- debt notification ,
- payment responsibility
- third party reimbursement
- collection of receivables
- disposition of collected revenues

Process functions should also establish collection practices, which seek to identify patients suffering financial hardship and attempt to absolve their debts in a compassionate and dignified manner.

Because the collection of government imposed user fees involves the handling of municipal funds, officials must establish internal controls to safeguard public funds. Agencies should implement internal auditing practices that provide proper accounting for public monies and discourage fraudulent behavior.

As with determining appropriate user fee charges, the establishment and implementation of billing and collection policies involves the consideration of factors that have enormous potential to upset the sensibilities of elected officials and the public. Well-managed administrative and accounting systems provide a means to demonstrate appropriate concern and conduct in administering public revenues.

PROCEDURES

This study attempts to identify and to analyze the types and manner of user fee charges assessed for emergency ambulance services delivered by a sample population of municipal fire service agencies in the Chicago metropolitan area. In so doing it endeavors to provide a yardstick for comparing ambulance user fees of the Naperville Fire Department with those of other regional rates. The analysis evaluates participating fire departments according to responses given to a survey questionnaire covering four related criteria: agency characteristics; fee for service charges; revenue sources; and collection

practices. It offers a descriptive examination of the funding, billing, and collection practices of those agencies with respect to the provision of emergency medical services and emergency ambulance transportation.

Study Population

The population studied for this project consisted of municipal fire service agencies responsible for providing first response emergency medical services and ambulance transportation to local populations. Survey participants were selected non-randomly through a purposive sampling from among fire service organizations in the Chicago metropolitan area (within a 50-mile radius of the City of Chicago). Sample selection gave consideration to selecting a diverse study group based upon the population base served by fire service agencies and geographic distribution throughout the metropolitan area. One hundred-twelve surveys were sent by first class mail to the chief administrators of selected fire departments from the five collar counties comprising the Chicago metropolitan region. Areas served by participating organizations varied from urban central city, to developed suburban, to developing suburban. Table 1 provides a break down of the survey group by geographic area.

TABLE 1

<u>County</u>	<u>Surveys Received</u>
Cook	40
DuPage	22
Lake	9
Will	4
Kane	5
Kendall	1

Instrument Design

The survey instrument utilized in this evaluation consisted of a four-part questionnaire developed to gather data from the study population on EMS service attributes and related user charges for each organization. The survey questionnaire, reproduced in Appendix 1, elicits responses from participants in the following four areas; agency characteristics, fee for service charges, revenue sources, and collection practices. The questions prompted participants to answer to a series of closed-ended queries by either choosing an answer from among a set of listed selections or by providing specifically requested

statistical information. Considering that the survey deals with evaluating certain practices of municipal agencies, all of the data requested (if available), constitutes information within the public domain and makes no attempt to violate standards of confidentiality.

The section on agency characteristics asks respondents to provide information on unique aspects of their organization's structural make-up and responsibilities. The purpose of this section is to provide information on production cost factors that influence levels of subsidy, expenses, and user fee charges thus broadening the focus of evaluation beyond a one dimensional review of fee charges alone.

Questions posed in this section relate to the following.

1. Nature of the organization
2. Means by which EMS services are provided
3. Level of clinical sophistication
4. Resources available
5. Patients served in 1997
6. Response time data
7. EMS budgetary expenditures

The questionnaire section, devoted to fee for service charges, provides the most significant survey data. It requests specific information on the types of EMS services charged for by the agency and whether those charges reflect fees for emergency response only, response coupled with transport, treatment procedures performed, supplies utilized, specialized services rendered, or any combination of the above. It asks participants to list transport and mileage fee charges assessed to patients and to identify any differences that exist between charges to residents of their particular municipality as opposed to non-residents.

Questions on revenue sources inquire as to the primary revenue source that funds agency EMS operations. The survey requests information on the amount of the tax levy assessed if property taxes comprise the primary funding mechanism and on the amount of total gross revenues collected from all EMS user fees charged.

The final survey section on collection practices asks respondents to identify the entity responsible for collecting user fees assessed by the agency. Choices include the specific agency, another

agency of municipal government, or another contracted agency. It also requests data on the percentage of user fee collections and on what types of third party payment, if any, the agency accepts from patients. A final section entitled comments permits participants to provide any necessary clarifications to their answers or commentary relative to the survey.

Limitations

This study attempts to compare data on the user fee charges assessed for ambulance use by fire service agencies in the Chicago metropolitan area. It focuses specifically on fire departments, as this constitutes the predominant means of providing emergency ambulance services in this geographic region. By evaluating responses from a survey group of EMS organizations the study endeavors to provide a benchmark tool for comparison.

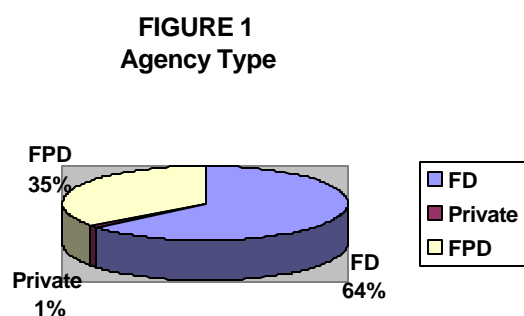
However, several procedural considerations limit the comprehensiveness of the study findings. One consideration involves dropout bias. “Questionnaires sent through the mail often have a very low response rate: ... A dropout bias (that is a distortion caused by nonreturned questionnaires) is always possible, but is even more likely with a low response rate.”(Katzner, Cook, and Crouch, 1991, p.183) A second consideration concerns the nonrandom selection of survey participants. The purposive sample, though simple and effective for the scope of this evaluation, provides a weak basis for generalized conclusions beyond the specific study population. It merely provides a snapshot view of generalized practices of a select group of fire service agencies within a confined geographic area.

RESULTS

The analysis of survey responses presented in this section will coincide with the format of the survey instrument. Analysis will report on responses to agency characteristics, fee for service charges, revenue sources, and collection practices. When describing statistical figures, all reported average numbers will be calculated as mean average numbers and dispersion measures will consist of one standard deviation about the mean.

Data Analysis - Agency Characteristics

Out of the 112 surveys distributed to fire service agencies in the Chicago metropolitan area, 81 organizations responded to participate in this project yielding a response rate of 72.3 percent. As detailed in Figure 1, of the responding agencies participating in the survey, 64.1 percent of responses (52) came from municipal fire departments, 34.5 percent (28) from fire protection districts, and one response representing 1.2 percent of the sample came from a non-profit corporation.



For the purpose of evaluating this survey section two terms require specific definition; municipal fire department and fire protection district. A municipal fire department shall consist of a fire service organization legally authorized to function as a

division of a local municipal government chartered by the State of Illinois. A fire protection district shall consist of a separate single purpose municipal taxing body chartered and authorized by the State of Illinois to levy taxes for the provision of fire protection and ambulance services to a proscribed jurisdiction. All of the fire service agencies that responded to the survey provided emergency ambulance service at an advanced life support level of care and all but one noted being directly responsible for managing those services within their communities. Even though they functioned as the

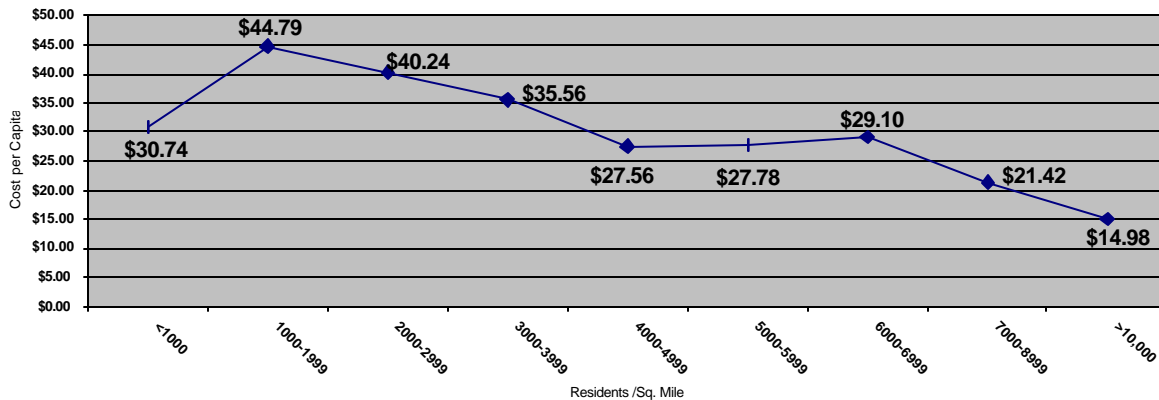
primary community EMS provider, 23.5 percent of these public agencies delivered ambulance services through use of a private EMS sub-contractor. This type of service delivery appeared to be more common in communities with populations of 50,000 or less (29%) as opposed to those with populations in excess of 50,000 (9%). Total populations served by participant agencies ranged from a low of 6000 residents to a high of 3,000,000 persons. More than 76 percent of survey responses came from agencies serving populations of 50,000 or less, and all but one survey came from agencies serving populations of less than 150,000. Table 2 identifies the number and percentage of respondent organizations and the means of ambulance service delivery by population.

Table 2

<u>Population</u>	<u>Responses</u>	<u>Percentage</u>	Ambulance Provider		
			<u>FD</u>	<u>Pvt.</u>	<u>Sub-cont.</u>
≤ 25,000	30	37.0 %	23	0	7
25,001-50,000	32	39.5 %	21	1	10
50,001-75,000	11	13.6 %	10	0	1
>75,000	8	9.9 %	8	0	0
			<u>62</u>	<u>1</u>	<u>18</u>

Costs, resource levels, and service demands varied significantly among the respondents. Only 55.5 percent of participating agencies provided data on total budgetary expenditures for EMS. Per capita costs for EMS averaged \$35.20 among participants (with a standard deviation of +/- \$20.21). Per capita costs ranged from a low of \$2.56 to a high of \$91.56. Overall, costs showed a general decrease in per capita expenditure (Figure 2) as population density (measured in population per square mile) increased.

FIGURE 2
Cost Per Population



Service demands measured by annual EMS calls per 1000 residents ranged from 29.95 to 192.33 and averaged 63.60 for all reporting agencies. Neither service demand levels nor population totals showed any consistent relationship to costs; however, population did appear to factor into the availability of resources. Agencies serving smaller populations demonstrated a lower ratio of residents per available ambulance units (Table 3).

TABLE 3

Ambulance per Population

<u>Population</u>	<u>Ambulance / Population</u>
≤ 25,000	1:8,887
25,001-50,000	1:15,896
50,001-75,000	1:20,411
75,001-150,000	1:22,935
> 150,000	1:50,847

Data Analysis – Fee for Service Charges

Research Question 1: What is the prevalence of ambulance user fee charges among surveyed fire service agencies? Fee for service charges identified by survey participants consisted of three specific types; base transport fees, mileage fees, and itemized charges for supplies and procedures. Of the 81 participating agencies, 92.5 percent (75) assessed some type of fee for ambulance transport services. For 49.3 percent (37/75) of them this represented the only type of user fee imposed. Fire service agencies charged residents less often than non-residents (53 percent as opposed to 92.5 percent) did and

to a lesser degree (an average of \$83 dollars less per transport). Table 4 lists the type of transport fees noted by responding agencies. This data shows that on average, participant agencies assessed a transport fee of \$218 for ALS transports and \$176 for BLS transports to residents of their jurisdictions, while they imposed an average fee of \$301 for ALS and \$259 for BLS transports to non-resident patients.

TABLE 4
Ambulance Transport Fees

	Resident Fees		Non-Resident Fees	
	<u>ALS</u>	<u>BLS</u>	<u>ALS</u>	<u>BLS</u>
Percentage Assessed	53.0%	50.5%	92.5%	90.1%
Mean Fee	\$218	\$176	\$301	\$259
Range	\$35-\$420	\$35-\$400	\$100-\$600	\$100-500
Standard Deviation +/-	\$101.85	\$84.25	\$93.31	\$92.94

Agencies assessed mileage fees much less frequently than transport fees, only 24.6 percent of the time (20). However, just as with transport fees, non-residents paid a mileage charge higher than that paid by residents, averaging \$7 per mile to the \$6 average of residents. The range for mileage fees varied from a low of \$3.50 per mile for resident patients to a high of \$12 for both residents and non-residents alike. Non-residents also paid mileage fees more often than residents, 24.6 percent of the time for non-residents as opposed to 17.2 percent of the time for residents. Survey results demonstrated that organizations using private sub-contractors to provide ambulance services were more likely to impose mileage fees than fire service organizations delivering those services directly. In this study 44.4 percent (8/18) of the agencies using private sub-contractors assessed mileage fees for transport while only 19.3 percent (12/62) of the fire service agencies not using private sub-contractors itemized a mileage fee.

In addition to billing for base transport and mileage charges, 39.5 percent (32/81) of the responding agencies indicated that they assessed additional fees for specific services, supplies, and treatment procedures. Of these 32 agencies, 28 charged for individual patient treatment procedures, 15 for supplies, 14 for special events coverage, and 11 for responses involving treatment without transport to the hospital. More specifically, only 18 agencies (22.2 % overall) listed detailed information on the

types and amounts of these charges. These responses included 42 different itemized treatments and procedures. Appendix 2 provides a full list of those items. Table 5 details the five most commonly assessed service charges.

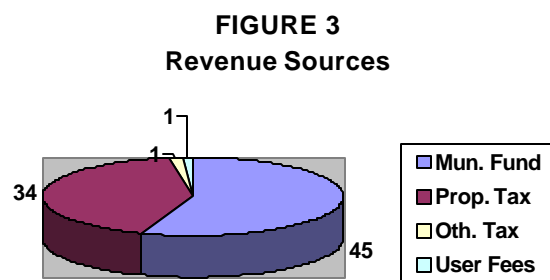
TABLE 5
Common Service Charges

	<u>EKG</u>	<u>Oxygen</u>	<u>IV</u>	<u>OB Delivery</u>	<u>Cold/HeatPack</u>
Percentage Assessed	16.0%	20.9%	11.1%	7.4%	7.4%
Mean Fee	\$92.54	\$36.76	\$37.77	\$858.33	\$26.25
Range	\$6-\$245	\$20-\$85	\$30-\$50	\$500-\$1650	\$20-\$30
Standard Deviation +/-	\$69.98	\$16.20	\$8.70	\$430.60	\$4.40

Survey data indicated that 47.4 percent of the fire service agencies using private sub-contractors to provide EMS services levied service charges while fire departments providing EMS services directly assessed service charges only 37.0 percent of the time.

Data Analysis – Revenue Sources

Research Question 2: Do user fee charges accurately reflect ambulance service costs? Survey responses specific to revenue sources showed that overwhelmingly agencies reported receiving their primary funding by either budget allocations from general revenue municipal funds or from direct property tax payments the majority of the time. As indicated in Figure 3 budget allocations provided primary funding for EMS operations 55.5 percent of the time while property tax payments served the same purpose in 41.9 percent of the cases. Only two agencies noted sources other than budget allocations and property taxes as the predominant means of obtaining financing for EMS operations.



Of those agencies receiving primary funding through direct payment of property tax assessments, the average tax levied amounted to 0.2197 per \$100 of assessed valuation. Assessments ranged from a low of

0.00095 to a high of 0.32395 with a standard deviation of plus or minus 0.0799.

Despite the fact that 92.5 percent of participating agencies charged some type of user fee for ambulance transport services, responses showed that in general collected fees defrayed operating expenses to a relatively small degree. Of the 36 respondents reporting both revenue and expense data, only one agency indicated that collected user fees offset costs by more than 50 percent. The average percentage of cost recovery through fee collections (expenses / fee revenues) amounted to 15.43 percent. The range of cost recovery percentage ran from a low of 0.24 percent to a high 61.55 percent. Data showed a standard deviation of plus or minus 14.57 percent.

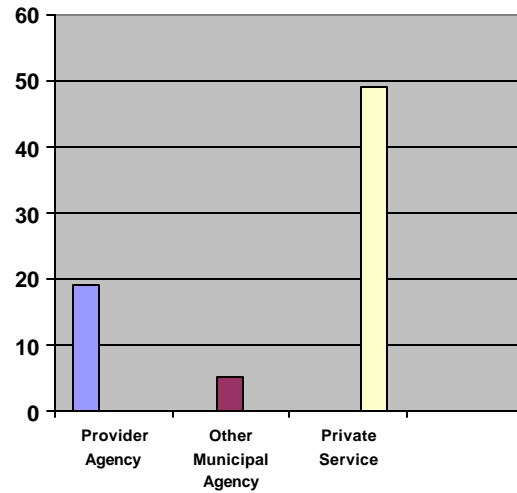
Data Analysis – Collection Practices

Research Question 3: How efficient are fire service organizations at collecting user fee revenues?

The survey asked participants to provide information about agency collection practices. Responses indicated that a large majority of the 73 organizations responding to this question utilized private billing services to collect fees assessed for ambulance services. As demonstrated in Figure 4, more than 60 percent (49) of the participants contracted with such services, as opposed to 23.4 percent (19) who discharged the billing responsibility in-house, and 6.2 (5) percent who deferred collection duties to another division of municipal government.

Among the agencies using a private collection service for their ambulance billing, 46 compensated those agencies based on a percentage of collections, two paid a per invoice charge, and one paid on a percentage gross collectibles. Fees paid based upon net collections ranged from a low of 5 percent to a high of 30 percent. The average fee paid amounted to 11 percent with a standard deviation of plus or minus 3.8 percent. The two agencies compensating their collection contractor based on a per invoice charge paid \$17 and \$20 dollars per invoice, while the agency compensating by a percentage of gross collectibles paid at a 7 percent rate.

**FIGURE 4
Fee Collection Responsibility**



Respondents did not uniformly report information about billing collection rates. While 75 previously indicated imposing a user fee, only 47 (62.6%) reported information on overall collection rates, 22 (29.3%) on collections from non-resident, and 3 (4%) on resident collection rates.

Information listed in Table 6 shows an overall average reported collection rate of 63 percent. Average collection rates by resident and non-resident showed 76.3 percent and 59 percent respectively, but were based on much smaller reporting samples from the survey population.

TABLE 6

Collection Rates

	<u>Overall</u>	<u>Residents</u>	<u>Non-Residents</u>
Average Rate	63%	76.3%	59%
Range	25-100%	50-100%	20-100%
Standard Deviation +/-	19%	25.1%	20%
Agencies Responding	47	3	22

The effectiveness of the collecting entities showed slight variation. Despite an overall collection rate of 63 percent, agencies using private collection services reported an average collection rate of 65 percent compared to 61 percent for the efforts performed by the municipal agencies. When comparing billing options within municipal agencies, collections done by municipal departments other than the fire department were the most effective of all indicating a 68 percent average rate, while those fire departments performing the billing work in-house reported on average only a 59 percent collection rate.

The final collection practice evaluated dealt with whether or not an agency accepted direct assigned payments from third party payers. Table 7 below lists the responses to this question.

TABLE 7**Acceptance of Third Party Payment**

	<u>Medicare</u>	<u>Private Insurance</u>	<u>Both</u>	<u>None</u>
Municipal Collectors (24)	54.1% (13)	45.8% (11)	37.5% (9)	33.3% (8)
Private Service Collections (49)	77.5% (38)	67.3% (33)	59.1% (29)	16.3% (8)
Totals (73)	69.8% (51)	60.2% (44)	52.0% (38)	21.9% (16)

Results showed agencies utilizing private service collectors were much more likely to collect payment directly from third party payers. They were 23.4 percent more likely than their municipal counterparts to accept assignment from Medicare, 18.5 more likely to accept payment from private insurance companies, and 21.6 percent more likely to take payments from both organizations. Municipal agencies doing their own billing were nearly twice as likely not accept payment from any third party payer.

DISCUSSION

The findings of this research indicate that the responding agencies participating in this study have readily embraced the idea of imposing fee charges upon users of municipal ambulance services. With more than 92 percent of the surveyed fire departments assessing some type of user fee, the practice appears consistent with the increasing prevalence of this concept within municipal governments throughout the country as noted in the literature review. Data further suggests that all agencies, whether actively or by default, have accepted the notion that municipal ambulance services constitute a merit type good. This seems apparent since reported user fee revenues collected barely yielded an average of 15 percent of the reported costs of providing ambulance services. As a result all agencies subsidized these services to a considerable degree, some (like those choosing not to charge any user fee at all) at a rate equal to 100 percent.

Agency administrators have apparently also acknowledged the political nature of the user fee assessments as well. This is indicated by results demonstrating that agencies on average charged non-resident patients nearly 40 percent more often than they charged resident patients and at rates 38 to 47 percent higher. This custom may stem in part from the belief that residents who pay taxes to support the existence of an ambulance service should not pay the same fee for use as non-residents who do not. The fact that non-residents pose no voting threat to elected officials may also influence this behavior. An assessment of both of these issues is beyond the scope of this project. The survey merely identifies that this practice exists.

The literature review noted increased service efficiency as one advantage of charging user fees. As argued in the literature, without identifying the true cost of services, administrators cannot develop appropriate and justifiable pricing. Nor can citizens evaluate the value and efficiency of the services they receive. However, in the case of this study the survey findings suggest that user fee assessments have not brought about such operational efficiencies or such public discourse.

Responses showed that though more than 92 percent of the services charged user fees, only 56.7 percent (46) provided information about full cost expenditures of emergency ambulance services. This information, coupled with the huge variance reported in fees charged by individual agencies for identical types of transport and treatment services implies, that sophisticated cost determinations and pricing analysis have not been performed by most of the organizations. Fees did not appear to be based on operating costs, rather charges appeared more likely to be based upon what the local markets would tolerate. Furthermore, the low overall collection rates coupled with the low average cost recovery suggest that revenue collections for most services were not a major operational consideration.

Study findings indicated that fire departments might increase the efficiency of revenue collections by seeking to maximize collections from third party payers. Survey results showed that agencies using private collection services reported a higher overall collection rate, and were much more likely to accept direct assigned payments from third party payers such as Medicare and private medical insurance carriers. These collection practices should be evaluated for their ability to further improve collection rates, to help increase user fee revenues, and to transfer a portion of the burden of paying for service use (justifiably) from the patient to their insurance carrier where applicable.

Survey findings offer several implications for the Naperville Fire Department as well as to any other fire service EMS organization charging ambulance user fees. Agencies wishing to remain consistent with the purpose of benefit based finance of municipal services must reevaluate their charging and collection practices. The Naperville Fire Department has never based ambulance fees upon full operating costs. Current fee charges (\$150 for transport of resident patients and \$300 for transport of non-resident patients) were based upon past evaluations of fee charges of similar sized communities and approved by the City Council. This process acknowledged that user fees for EMS service were not intended to provide full cost recovery of EMS expenses.

While this study project does not invalidate that process the results of this research do indicate that the department and the public might be better served by a more sophisticated analysis of costs, fees,

and revenue collection practices. Even though elected officials may resolve to establish user fee rates below full cost and thereby subsidize a portion of the service, such discussions should proceed with accurate knowledge of appropriate operating expenses. Without such knowledge, fee determinations run the risk of becoming arbitrary and capricious as the tendency to charge non-resident patients greater fees indicates. Based upon the wide fluctuations in transport and treatment fees reported in this survey, the fire department might have a difficult time credibly justifying fee charges upon “market rates” unless those rates bore a relationship to actual expenses or a predetermined level of cost recovery.

Less than aggressive efforts at collecting user fee revenues also pose the potential for undermining the credibility of user fee rates. While the Naperville Fire Department’s overall collection rate of 72 percent exceeds the survey average by 9 points, findings indicate that the rate could be even higher if the organization adopted the practice of accepting assigned payment from third party payers.

RECOMMENDATIONS

The intent of this research project was to examine the nature of user fee assessments imposed by fire service agencies of a selected study population. In so doing it attempted to provide a yardstick for comparing ambulance user fees of the Naperville Fire Department with other agencies. Based upon findings that demonstrated a wide variation in transportation and treatment fees, low levels of cost recovery through user fee revenue (high levels of cost subsidization), and significant differences in collection rates and practices the following recommendations flow from this research project.

1. The fire department should collect and analyze service cost data, evaluating both direct and indirect costs associated with providing emergency ambulance services.
2. Based upon cost data analysis, the department should determine service pricing by establishing a fee schedule.
3. In order to maximize user fee collections the department should develop collection practices that include procedures for direct billing of insurance carriers, accepting third party payment, and dealing with patients who suffer financial hardship.

The fire department should employ a template such as the IAFC Cost Allocation Model for examining service costs associated with providing ambulance service. The template will provide a method for analyzing costs on an annual basis and for historical review of service cost data. The process will yield a user fee that reflects charges based upon full cost recovery. From that point, department staff may develop fee options representing specific levels of less than full cost recovery such as 75, 50, and 25 percent of service costs. In this manner, administrators may present to local elected officials, for their consideration, a range of credible fee options that bear a direct relationship to expenses, revenues, and subsidy levels.

The department should establish a fee schedule based upon transport costs. This represents the simplest and most justifiable type of assessment. First, the department, by prearranged agreement, receives resupply of disposable equipment items from all hospitals to which they transport. The receiving hospital then charges back the patient for any supplies used in the prehospital phase of treatment. Since the department bears no expense for these supplies, an itemized supply charge would not be ethical or appropriate.

Second, the wide variance in fees reported for specific patient treatment procedures demonstrates the subjectivity associated with determining an appropriate and justifiable fee for these services as well. On the surface it appears reasonable to charge a higher fee to patients who receive more sophisticated advanced life support care than to patients who receive more basic less urgent treatments. Arguing against this practice is the fact that, regardless the nature of the ambulance call and the treatment provided, once an EMS unit commits to a specific patient the vehicle, the crew, and all the equipment become unavailable to anyone else for the duration of that incident.

The department should work with the finance department to refine existing practices to improve upon the collection rate for user fee revenues. This should include procedures that permit timely and direct billing of a patient's third party medical insurance carrier as well as accepting direct assigned payment from those carriers. Active account management could then directly bill the patient for any remaining balance. Collection procedures should also be developed for consistently and compassionately handling patients with identifiable financial hardships.

Lastly, the department should disseminate data on the survey results to all agencies that participated in the survey. Collection and analysis of this type of data should occur annually. The sharing of such information among municipal fire departments may help bring increased consistency to the application of ambulance user fee charges.

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APPENDIX A

NAPERVILLE FIRE DEPARTMENT

1998 Ambulance User Fee Survey

Department Name: _____ Contact Person: _____

Department Address: _____ Telephone: _____

_____ Fax Number: _____

Agency Characteristics

Agency Type (check one):

☐ Municipal Fire Department ☐ Fire Protection District ☐ Other (specify) _____

Ambulance Services Provided By (check one):

☐ Fire Department ☐ Private Ambulance ☐ Contract Service ☐ Municipal Third Service

If other than Fire Department please identify the service used: _____

Primary Level of Service Provided (check one):

☐ ALS Transport ☐ BLS Transport ☐ ALS First Response ☐ BLS First Response

Population Served: _____ Square Miles Protected: _____ No. of Stations: _____

1997 EMS Incidents: _____ Patients Transported: _____ Patients Refusing: _____

1997 EMS Response Times (if available): Average Response Time _____

Percent of Response Times: < 4 minutes _____ ≥4 <6 minutes _____ ≥6 <8 minutes _____ ≥8 minutes _____

Number of Transport Units: _____ Total Budgetary Expenditure for EMS: _____

Fee For Service Charges

User Fees Charged (check all that apply):

☐ None ☐ Any EMS Response ☐ Patient Transport
☐ Supplies ☐ Treatment Procedures ☐ Special Services (i.e. standby for special events)

Please specify or include a list of all additional EMS related fee charges. _____

Transport Fee Charges:

Resident

Non-Resident

ALS _____ Mileage _____ ALS _____ Mileage _____

BLS _____ Mileage _____ BLS _____ Mileage _____

Revenue Sources

Primary Revenue Source (check one):

- | | | |
|--|---------------------------------------|--|
| <input type="checkbox"/> Municipal Funds (budget allocation) | <input type="checkbox"/> Property Tax | <input type="checkbox"/> User Fees |
| <input type="checkbox"/> Contract Fees | <input type="checkbox"/> Other Taxes | <input type="checkbox"/> Other Sources |

If primary source is property tax what is the levy for;

Fire Protection Rate _____

Ambulance Service Rate _____

Total Gross Revenues Collected From EMS User Fees: _____

Collection Practices

Agency Responsible for Fee Collections (check one):

- ☐ Provider Agency ☐ Other Municipal Agency ☐ Contract Collection Service

If contract service utilized, identify the agency: _____

If contract service utilized what collection fee do you pay: _____

Collection Rate (check one):

Overall Rate _____ Resident Rate _____ Non-Resident Rate _____

Direct assigned payments accepted from third party payors: (check all that apply):

- ☐ None ☐ Medicare ☐ Medicaid ☐ Private Insurance

Comments

Please return this form to:

**Lieutenant Patrick J. Mullen
EMS Coordinator
Naperville Fire Department
1380 Aurora Avenue
Naperville, IL 60540**

FAX: 630-420-4094

Telephone: 630-305-5901

APPENDIX B

EMS SERVICE CHARGES

<u>Treatment/ Procedure</u>	<u># of Responses</u>	<u>Average Fee</u>	<u>Fee Range</u>	<u>Fee Dispersion +/-</u>
EKG 3-lead	13	\$ 92.54	\$6-245	\$ 69.98
Defibrillation	2	125.00	-----	-----
External Pacing	3	190.00	150-245	49.24
CPR	1	250.00	-----	-----
Oxygen	17	36.76	20-85	16.20
IV	9	37.78	30-50	8.70
Intraossious	1	100.00	-----	-----
Pulse Oximetry	3	42.50	27.50-50	12.99
Medication Adm.	4	36.50	28-50	10.63
ET Intubation	4	81.25	75-100	12.50
EOA Intubation	1	15.00	-----	-----
Nitrous Oxide	5	101.00	30-200	67.12
Blood Sugar	2	10.00	-----	-----
Cricothyrotomy	1	50.00	-----	-----
Pleural Decompression	1	500.00	-----	-----
OB Delivery	6	858.33	500-1650	430.00
MAST	1	50.00	-----	-----
Suction	5	44.00	30-55	10.84
Extrication	2	225.00	200-250	35.35
Backboard	5	63.00	45-85	16.81
KED	4	65.00	50-85	14.72
Head Immobilization	1	37.50	-----	-----
Scoop Stretcher	3	37.50	35-100	34.03
Stair Chair	3	45.83	35-52.50	9.46
Splinting	5	33.00	20-55	13.04
Traction Splint	5	55.00	50-70	8.66
Bandaging	5	36.50	30-52.50	9.29
Burn Sheet	2	50.00	25-75	35.36
Cold/Heat Pack	6	26.25	20-32.50	4.40
Irrigation	5	26.50	20-37.50	6.52
Restraints	3	200.00	100-250	86.60
Telemetry	4	32.50	20-60	18.48
Ambulance Assist	2	100.00	-----	-----
PPE	1	25.00	-----	-----
Body Bag	2	80.00	75-85	7.07
3 rd Attendant	1	50.00	-----	-----
Treat no Transport	5	117.00	75-175	43.39